

## APPENDIX 9

### Threatened and Endangered Species Descriptions

Mexican Spotted Owl: The Mexican spotted owl (MSO) currently occupies a broad geographic area but does not occur uniformly throughout its range. Instead the owl occurs in disjunct localities that correspond to isolated mountain systems and canyons. The range of the MSO in the United States has been divided into six recovery units (RUs) as identified in the Recovery Plan. The planning area is included in the Southern Rocky Mountain-Colorado RU.

MSO breed sporadically and do not nest every year. In good years most of the population will nest; whereas, in other years only a small portion of pairs will nest successfully. The reasons for this pattern are unknown.

MSO reproductive chronology varies somewhat across its range. In Colorado, courtship apparently begins in March with pairs roosting together during the day and calling to each other at dusk. Eggs are laid in early April. Incubation begins shortly after the first egg is laid, and is performed entirely by the female. The northern spotted owl incubates for approximately 30 days and it is assumed that the MSO incubates for a similar period. During incubation and the first half of the brooding period, the female leaves the nest only to defecate, regurgitate pellets, or to receive prey from the male, who does all or most of the foraging. The eggs usually hatch in early May with the nestling owls generally fledging four to five weeks after hatching, then dispersing in mid September to early October.

The MSO was listed as a threatened species on April 15, 1993. Two primary reasons were cited for listing: historical alteration of its habitat as a result of timber management practices, specifically the use of even-aged silviculture, plus the threat of these practices continuing. The danger of catastrophic wildfire was also cited as a potential threat for additional habitat loss. Riparian areas were also noted as an area of concern.

The general distribution of MSO in the planning area occurs northeast of Canon City (east of Fourmile Creek), north of Highway 50 between Canon City and Penrose, and west of Highway 115 from Penrose to Colorado Springs. The northern boundary is Pikes Peak. Suitable habitat is located on the eastern and southern slopes of Pikes Peak, Beaver Creek WSA, Phantom Canyon and associated side canyons. MSOs have not been found west of Canon City.

In March of 2001, the US Fish and Wildlife Service designated Critical Habitat for the MSO. The entire habitat for MSOs that occur on Public Lands in Colorado is within the RGFO, much of it within the TMP area. While a large area has been designated (approximately 149,000 acres), the Recovery Plan makes it clear that only those areas that contain the primary constituent elements necessary to support MSOs need to be considered critical habitat.



All the MSO habitats found in canyons on Public Lands in the Pikes Peak area are located in extremely rugged canyon habitats with steep canyon walls, cliffs, potholes and ledges. Stringers of mixed conifer vegetation are found in the canyon bottoms in these areas. The primary constituent elements essential to the conservation of the MSO include those physical and biological features that support nesting, roosting and foraging. In canyon habitats the primary constituent elements include the following attributes: cooler, often more humid conditions than surrounding areas; clumps or stringers of trees and/or canyon walls containing crevices, ledges, or caves; high percent of ground litter and woody debris; and riparian or woody vegetation.

Twenty canyon complexes have been surveyed by BLM since 1991. These areas have all been surveyed with trained and certified biologists using the standard survey protocol. These 20 sites represent 48,128 acres of habitat. MSOs have been documented in 10 of these sites, with five sites containing nesting pairs. Protected Activity Centers (PACs) have been established for seven sites. PACs were delineated in 1993 with the completion of the Recovery Plan for the MSO. PACs were established with the intent to protect the best available habitat for the MSO. PACs are approximately 600 acres in size, providing for the nest site, several roost sites and proximal and highly used foraging areas. Mexican spotted owl territories are monitored annually as time and funds permit.

Bald Eagle: Colorado populations of bald eagles typically nest in large cottonwood trees along rivers and reservoirs. Eagle densities reach their peak during the winter months when migrants arrive from the north. The bald eagle is a common winter (December through February) visitor to the Arkansas River valley. Typically, up to five birds can be found from Leadville to Canon City and up to five birds can be found from Canon City to Pueblo Reservoir. An active bald eagle nest is located on private land along Fourmile Creek, north of Canon City. These birds could be expected to forage on Public Lands. Use by eagles, however, is so incidental that preferred or critical areas such as roosting or feeding sites have not been identified. Bald eagles may also be found along the Arkansas River east of Florence at the Blue Heron ponds, recently acquired by BLM. The area was formerly a gravel mining operation and is devoid of large cottonwood trees, except for the eastern and western edges that contain a few large trees suitable as roosting sites for eagles. Bald eagles roosting on the property have not been documented.

Mountain Plover: On May 3, 1993, the US Fish and Wildlife Service listed the mountain plover as a Candidate species under the Endangered Species Act. On February 16, 1999, a notice was published in the *Federal Register* proposing to list the mountain plover as a Threatened species. On September 9, 2003 the US Fish and Wildlife Service found that listing the plover was not warranted and withdrew the proposed rule. Colorado Natural Heritage Program considers the mountain plover globally imperiled (G2/S2B). The species is listed by the US Forest Service and BLM as a Sensitive species, and by the Colorado Division of Wildlife as a Species of Special Concern.

Breeding habitat for mountain plovers in Colorado can generally be described as flat, dry land, with very short vegetation and a fairly high percentage of bare ground. Recent research by CNHP, however, indicates that there are also some peculiarities in the South



Park breeding habitat: mountain plovers in South Park will nest on steeper slopes (9-12%) than those used on the plains; they will nest in comparatively thick/tall vegetation; and near stark edges (within approximately 100 meters). While percent bare ground of the South Park landscape is relatively constant, height of vegetation and degree of slope vary across the geography. Still, it appears that mountain plovers are more readily found nesting in areas that offer the gentlest slopes and the shortest vegetation. The main difference between South Park habitat and that found on the eastern plains may be in the parameters that define “most gentle slopes” and “shortest vegetation.”

Mountain plovers have never been documented in the Gold Belt TMP area and there is very little suitable habitat. Less than a thousand acres of grassland habitat is found on the southern end of the planning area in the vicinity of Canon City and Penrose. Very little Public Land is found in this area.

Black-tailed Prairie Dog: On February 3, 2000 after extensive biological review, the US Fish and Wildlife Service determined that the black-tailed prairie dog warranted listing under the Endangered Species Act as a Threatened species. Because of other higher priority work, the US Fish and Wildlife Service delayed listing the black-tailed prairie dog but re-evaluates the status of the species every 12 months. As a result of the decision, the black-tailed prairie dog is considered a Candidate species under the definition as outlined in the Federal regulations that govern the management of Threatened and Endangered Species.

In the summer of 2001, Colorado started aerial surveys for black-tailed prairie dogs throughout their historic range. Based on known locations of black-tailed prairie dogs, transects were developed for each county to give a 95 % confidence interval to the resulting data. Transects were flown at 100 feet to 150 feet elevation. Geographic Positioning System (GPS) technology was used to track both the flight lines and the leading and trailing edge of each active black-tailed prairie dog colony located on the transect. The survey has been completed and 2,799 acres of prairie dog habitat were located in Fremont County. Of the total for Fremont County, 2,352 acres are located on private lands and 447 acres are on State Land Board lands. There were no black-tailed prairie dogs documented on lands administered by BLM. Statewide, 631,000 acres of black-tail prairie dog habitat were documented.

Black-tail prairie dog populations on Public Lands within the Gold Belt TMP area have not been documented. There are less than a thousand acres of grassland habitat managed by BLM within the Gold Belt TMP area that potentially could provide habitat for the species. This habitat is located at the southern edge of the planning area between Canon City and Penrose.

Gunnison’s Prairie Dog: This species is limited to high mountain valleys and plateaus in the southern Rocky Mountains and is found at elevations above 6,000 feet. Its distribution centers on the Four Corners region where the states of Utah, Colorado, New Mexico, and Arizona meet. The northernmost population of Gunnison’s prairie dog is found in South Park, CO, while the southernmost population resides in southwestern New



Mexico. Compared to the habitats of other prairie dog species, the habitat of this species varies greatly with respect to topography and vegetation. In addition, the burrow systems are more similar to those of ground squirrels than they are to other species of prairie dogs. Entrances are usually located on slopes or small hummocks rather than in depressions, protecting the burrows from flooding. Gunnison's prairie dogs are often found in semi-social aggregations and colonies of these mammals are generally smaller than those of other species of prairie dogs and usually consist of fewer than 50 to 100 individuals.

Gunnison's prairie dogs are very rare in the Gold Belt TMP area. Suitable habitat for the species is not common in the mountainous topography of the planning area. The Colorado Division of Wildlife recently collected all known records of this species in the southeast portion of the state and few dog towns were documented. Only one small colony is known for Public Lands in the planning area and is located in the Deer Haven Ranch area. Gunnison's prairie dogs were probably never common in the planning area due to the lack of suitable habitat.

Peregrine Falcon: Peregrine falcon habitat includes nesting and hunting sites, as well as migration and wintering areas. Typical nesting sites are cliffs more than 200 feet high that overlook water and permit extensive views of the surrounding area. Prey abundance and diversity provided by these situations are major factors in eyrie (nest) selection. Peregrines may travel up to 17 miles from nesting cliffs to hunting areas. Preferred hunting habitats include cropland, meadows, river bottoms, marshes and lakes that provide an abundance of avian prey. Birds are occasionally reported in Colorado during the winter but most peregrines migrate to Central and South America.

Peregrine falcons in the area are found in the roughest, most rugged, inaccessible areas BLM manages. Large canyon complexes with extensive rock are typically used during the breeding season. Peregrine falcons occupy three sites during the breeding season within the planning area. In 1988 a pair became established in Beaver Creek, near Victor. This site was an historic eyrie and was one of the first to be re-occupied as the population recovered. This site has been producing young since being re-occupied. A new eyrie was established in 1994 in Little Turkey Creek southwest of Colorado Springs and a new eyrie was established in lower Beaver Creek in 1998. Both these sites have successfully fledged young.

Recovery goals for nesting peregrines were exceeded several years ago. Colorado documents over 100 nesting pairs of peregrines each year. The peregrine was downlisted from a Federal Threatened species to a state listed Species of Special Concern as recovery progressed. The BLM considers the peregrine falcon a Sensitive species.

Brandegge Wild Buckwheat: The Brandegge wild buckwheat (*Eriogonum brandegei*) is listed as a BLM Sensitive species. It is found in the valley of the upper Arkansas River in Chaffee and Fremont Counties, Colorado. It occurs on barren clay-loam soil in the Morrison formation. The Colorado Natural Areas Program, in cooperation with The Nature Conservancy, designated a site in Chaffee County as the Droney Gulch State



Natural Area. The Droney Gulch site represents the best known occurrence in the world for this species. An equally important site is the Cleora site, located southeast of Salida. This species also occurs in the Garden Park area north of Canon City, within the Gold Belt planning area. Several thousand individual plants are found in several sites along Fourmile Creek. Much of the area has been disturbed by past mining and OHV use, with increases in OHV use in recent years. The area that contains the buckwheat plant is designated as the Garden Park Research Natural Area by BLM and the state of Colorado and as a BLM ACEC.

Dwarf Milkweed: Dwarf milkweed (*Asclepias uncialus*) habitat consists of shortgrass prairie, often on sandstone-derived soils and gravelly or rocky slopes at an elevation of 4000-6500 feet. In the planning area it occurs north of Canon City in the Oil Well Flats and Dinosaur Flats areas, growing on the lower side slopes of canyon walls. Other associated species include juniper, mountain mahogany, blue grama, yucca and prickly pear cactus. Dwarf milkweed is very rare with small population sizes and is only known from isolated occurrences in Colorado, New Mexico, Wyoming and Arizona. Surveys by the Colorado Natural Heritage Program in 1996 documented one population of this species with 24 individual plants in Oil Well Flats. Previous surveys documented a small population in the Dinosaur Flats area.

Golden Blazing Star: Golden blazing star (*Menzelia chrysantha*) is a tall plant with yellow flowers. The habitat consists of barren slopes of limestone, shale or clay at elevations of 5,120 -5,700 feet. This species is known from less than 20 locations in the Arkansas Valley from Pueblo Reservoir to Canon City and is not found anywhere else in the world. Public Lands support two excellent populations of blazing star within the Gold Belt TMP area, one in the Fourmile Creek drainage north of Canon City and the other at Blue Heron ponds in the dry uplands. Both populations of this species that occur on Public Lands provide an important potential haven for the Golden blazing star.